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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,547	11/28/2001	Esa Jalonen	4208-4045	9335

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EXAMINER
TRUONG, LAN DAI T

ART UNIT	PAPER NUMBER
2152	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	09/995,547	JALONEN ET AL.
	Examiner	Art Unit	
	Lan-Dai Thi Truong	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 November 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>28 November 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>04/04/2004</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

Claims 1, 5, 12, 14 and 31 are rejected under 35 U.S.C 103(a) as being un-patentable

over Baginwar (U.S. 6,611,863) in view of Lakshman et al. (U.S. 6,341,130)

Regarding to claim 1:

Baginwar discloses the invention substantially as claimed, including a method, which can

be implemented in a computer hardware or software code for a receiver to detect a need to

implement a filter to a multicast program, the method comprising:

Examining a connection from a client machine: (Baginwar discloses communications

between proxy devices, devices, and a device discovery; many of filters are registered proxy

devices with a call-back function to the device discovery ; the device discovery then exams and

matches device-specific information/ or protocols/ or IP addresses of the device with registered

filters to determine which filter should be retrieved from the list: column 7, lines 64-67; column

8, lines 1-7; column 5, lines 6-67; column 6, lines 1-30)

Retrieving a filter parameter for the connection: (Baginwar discloses all devices those are

matched with registered filter are put into enforce list those are managed under filter policy

which retrieved from proxy device: column 6, lines 31-67; column 5, lines 1-41)

However, Baginwar does not explicitly disclose implementing the filter parameter as a filter for a multicast program

In analogous art, Lakshman disclose method applying a selected entry/ filter rule from filter-rule table on the multicast packet, see (abstract, lines 24-30; column 4, lines 52-67; column 3, lines 52-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Lakshman's ideas of applying a selected entry/ filter rule from filter-rule table on the multicast packet with Baginwar's system in order to increase benefits for multicast program producer, for example, only contracted subscribers can receive the broadcasting program, see (column 4, lines 60-67)

Regarding to claims 5, 12, 14 and 31:

Those claims are rejected under rationale of claim 1

Claims 2, 4, 6 and 13 are rejected under 35 U.S.C 103(a) as being un-patentable over Baginwar-Lakshman in view of Duvall et al. (U.S. 5,884,033)

Regarding to claims 2, 4, 6 and 13:

Baginwar-Lakshman discloses the invention substantially as disclosed in claim 1, but does not explicitly teach wherein the receiver is integrated with the client machine; wherein the connection from a client machine is used to determine the filter parameter to be retrieved.

In analogous art, Duvall discloses method of data stream filtering is implemented by receiver, see (abstract; column 3, lies 40-67; column 4, lines 1-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Duvall's ideas of filtering is implemented by receiver with

Baginwar-Lakshman's system in order to provide secure for message transmission over the

Internet, see (column 4, lines 60-67)

Claims 3 is rejected under 35 U.S.C 103(a) as being un-patentable over Baginwar-

Lakshman in view of Krumel et al. (U.S. 7,013,482)

Regarding to claim 3:

Baginwar-Lakshman discloses the invention substantially as disclosed in claim 1, but

does not explicitly teach wherein examining a connection further comprises examining a user

datagram protocol (UDP) port

In analogous art, Krumel disclose method of detecting if message is UDP, see (column

12, lines 35-60; column 14, lines 30-54)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Krumel's ideas of detecting if message type select appropriated

filter with Baginwar-Lakshman's system in order to provide an efficient filtering system

Claims 7, 11 and 15 are rejected under 35 U.S.C 103(a) as being un-patentable over

Baginwar (U.S. 6,611,863) in view of Haggerty et al. (U.S. 6,331983)

Regarding to claim 7:

Baginwar discloses the invention substantially as claimed, including a method, which can

be implemented in a computer hardware or software code for a receiver to detect a need to

remove a filter for a multicast program, the method comprising:

Examining a filter; determining a connection the filter is associated with: (Baginwar

discloses the device discovery exams and matches device-specific information/ or protocols/ or

IP addresses of the device with registered filters to determine which filter should be retrieved

from the list: column 7, lines 64-67; column 8, lines 1-7; column 5, lines 6-67; column 6, lines 1-30)

Examining a plurality of connections from a client machine: (as similar to the rejections for the limitation above, Baginwar discloses "the device discovery" which shares functionality with "a client machine" as claimed which exams and matches device-specific information/ or protocols/ or IP addresses of the devices with registered filters to determine which filter should be retrieved from the list: column 7, lines 64-67; column 8, lines 1-7; column 5, lines 6-67; column 6, lines 1-30)

However, Baginwar does not explicitly disclose step of removing the filter if the connection does not correspond to the connection the filter is associated with

In analogous art, Haggerty discloses method for removing filter in response to upmap message/ leave message: column 24, lines 11-16, 34-55; column 29, lines 39-67; column 30, lines 1-67; column 31, lines 1-29; column 33, lines 6-11)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Haggerty's ideas of removing filter in response to upmap message/ leave message with Baginwar's system in order to provide an efficiency multicasting packets filtering system, see (column 1, lines 1-10; column 7, lines 5-20)

Regarding to claims 11, 15:

Those claims are rejected under rationale of claim 7

Claims 8 and 10 are rejected under 35 U.S.C 103(a) as being un-patentable over Baginwar-Haggerty in view of Duvall et al. (U.S. 5,884,033)

Regarding to claims 8 and 10:

Baginwar- Haggerty discloses the invention substantially as disclosed in claim 7, but

does not explicitly teach wherein the receiver is integrated with the client machine

In analogous art, Duvall discloses method of data stream filtering is implemented by

receiver, see (abstract; column 3, lies 40-67; column 4, lines 1-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Duvall's ideas of filtering is implemented by receiver with

Baginwar- Haggerty system in order to improve secure for message transmission over the

Internet, see (Duvall: column 4, lines 60-67)

Claims 9 and 16-17 are rejected under 35 U.S.C 103(a) as being un-patentable over

Baginwar- Haggerty in view of Krumel et al. (U.S. 7,013,482)

Regarding to claim 9 and 16:

Baginwar-Haggerty discloses the invention substantially as disclosed in claims 7 and 15,

but does not explicitly teach wherein examining a connection further comprises examining a user

datagram protocol (UDP) port; and the message is an IGMP message

In analogous art, Krumel disclose detecting if message is UDP/ or IGMP message, see

(column 12, lines 35-60; column 14, lines 30-54)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Krumel's ideas of detecting if message type select appropriated

filter with Baginwar-Haggerty's system in order to provide an efficient filtering system

Claims 21-23, 33 are rejected under 35 U.S.C 103(a) as being un-patentable over

Baginwar-Lakshman in view of Wootton et al. (U.S. 6,128,298)

Regarding to claim 21:

Baginwar-Lakshman discloses the invention substantially as disclosed in claim 1, but

does not explicitly teach create socket; binding the socket to port number

In analogous art, Wootton discloses a socket is defined based on associations with ports,

see (column 5, lines 40-67; column 6, lines 62-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Wootton's ideas of defining socket based on associations with

system ports with Baginwar-Lakshman's system in order to be able to reuse known technique for

saving resources and development time consuming

Regarding to claims 22-23 and 33:

Those claims are rejected under rationale of claim 21

Claims 24-26 are rejected under 35 U.S.C 103(a) as being un-patentable over

Baginwar-Lakshman-Wootton in view of Haggerty et al. (U.S. 6,331,983)

Regarding to claim 24:

Baginwar-Lakshman- Wootton discloses the invention substantially as disclosed in claim

21, but does not explicitly teach leaving multicast group; removing a filter based on the filter

parameter

In analogous art, Haggerty discloses method for removing filter in response to upmap

message/ leave message, see (column 24, lines 11-16, 34-55; column 29, lines 39-67; column 30,

lines 1-67; column 31, lines 1-29; column 33, lines 6-11)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Haggerty's ideas of removing filter in response to upmap

message/ leave message with Baginwar-Lakshman- Wootton's system in order to save filter memory

Regarding to claims 25-26:

Those claims are rejected under rationale of claim 24

Claims 18, 29 and 32 are rejected under 35 U.S.C 103(a) as being un-patentable over Haggerty et al. (U.S. 6,331,983) in view of Wootton et al. (U.S. 6,128,298)

Regarding to claim 18:

Haggerty discloses the invention substantially as claimed, including a method which can be implemented in a computer hardware or software code for managing a filter, the method comprising:

detecting an IGMP packet containing an instruction to join or leave a multicast group, said IGMP packet being associated with an entry in a table: (Haggerty discloses a Switch receives an IGMP joint group message from a host: column 28, lines 45-64; figure 10)

removing a filter based on a filter parameter associated with the entry in the table that corresponds to the IGMP message having the instruction to leave a multicast group: (Haggerty discloses method for removing filter in response to upmap message/ leave message: column 24, lines 11-16, 34-55; column 29, lines 39-67; column 30, lines 1-67; column 31, lines 1-29; column 33, lines 6-11)

However, Haggerty does not explicitly disclose step of adding filter based on a filter parameter associated with the entry in the table

In analogous art, Wootton discloses method for adding new entry into filter table if new connection is detected, see (column 7, lines 1-24)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Wootton's ideas of adding new entry into filter table if a new connection is detected with Haggerty's system in order provide an efficient filtering system

Regarding to claims 29 and 32:

Those claims are rejected under rationale of claim 18

Claim 27 is rejected under 35 U.S.C 103(a) as being un-patentable over Krumel et al. (U.S. 7,013,482) in view of Wootton et al. (U.S. 6,128,298)

Regarding to claim 27:

Krumel discloses the invention substantially as claimed, including a method, which can be implemented in a computer hardware or software code for activating a data filter in a Digital Video Broadcast--Terrestrial system having a service information table (SIT) comprising an entry having a filter parameter and a filter status, said system transmitting an IGMP message, the method comprising:

detecting a IGMP message: (Krumel disclose detecting if message is IGMP: column 12, lines 35-60

retrieving a filter parameter from an SIT: (Krumel discloses a rule-base filtering is selected form rule controller based on detected message type: column 7, lines 1-52)

However, Krumel does not explicitly disclose activating a filter based on the filter parameter; and changing a filter status in the SIT

In analogous art, Wootton discloses filter table includes changed statuses based on

sessions connection conditions, see (column 6, lines 15-50)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Wootton's ideas of including changed statuses in filter table

based on sessions connection conditions with Krumel's system in order provide an efficient

filtering system

Claims 19-20, 28, 30 and 34 are rejected under 35 U.S.C 103(a) as being un-

patentable over Duvall et al. (U.S. 5,884,033) in view of Wootton et al. (U.S. 6,128,298)

Regarding to claim 28:

Duvall discloses the invention substantially as claimed, including a method, which can be

implemented in a computer hardware or software code for removing a data filter in a Digital

Video Broadcast--Terrestrial system having a service information table (SIT) comprising an

entry having a filter parameter, a User Datagram Packet (UDP) port number, and a filter status,

said system also having a UDP Listener Table comprising an entry having a UDP port number

and a local internet protocol (IP) address that indicates that said entry is a multicast connection,

the method comprising:

polling a UDP Listener Table; correlating a UDP entry with an SIT entry: (Duvall

discloses an Internet filtering system for filtering data transferred over the Internet utilizing

immediate and deferred filtering actions; in Duvall's filtering system, data streams transmission

information (e.i. ports, state of each active data stream) are monitored and maintained in an

internal table; Duvall also teaches method for associating/interacting between the internal table

and filter database; each filter entry stored in filter database are compared with information in

data stream to determine whether action needed to be taken: title, column 3, lines 40-67; column

4, lines 1-67; column 5, lines 7-29; column 6, lines 42-67)

However, Duvall does not explicitly disclose identifying an active status as the filter

status; removing a data filter corresponding to a filter parameter of the identified SIT entry; and

changing the filter status of the SIT entry

In analogous art, Wootton discloses filter table includes changed statuses based on

session connection conditions; if the connection is dropped, then the entry in table is deleted, see

(column 6, lines 15-50)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Wootton's ideas of including changed statuses in filter table

based on session connection conditions with Duvall's system in order provide an efficient

filtering system

Regarding to claims 19-20, 30 and 34:

Those claims are rejected under rationale of claim 28

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. The following patents and publications are cited to further show the state of the art

with respect to "event or polling drive DVB-T filter detection": 6772348; 6810396;

20010020254; 20020035730; 20010025377; 20030100325; 6891844; 6587463

Conclusions

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lan-Dai Thi Truong whose telephone number is 571-272-7959.

The examiner can normally be reached on Monday- Friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob A. Jaroenchonwanit can be reached on 571-272-3913. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

04/01/2007

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